2008 DOE HYDROGEN PROGRAM MERIT REVIEW AND PEER EVALUATION MEETING BLOCK SCHEDULE

														Schedul	e as of:	13-M	ay-08
	Monday June 9		Tuesday	June 10)	W	ednesd	ay June	11	1	Thursday	y June 1	2	Friday June 13			
Session		Α	В	С	D	Α	В	С	D	Α	В	С	D	Α	В	С	D
Salon		V&VI	IV	III	1&11	V&VI	IV	Ш	1811	V&VI	IV	Ш	1811	V&VI	IV	Ш	1&11
8:15										Review	ver Orie	ntation N	/leeting				
8:30 8:45		PD	ST	FC	AN								ED				
9:00		PD	ST	FC	AN	AN	ST	FC	BES	PD	AN	FC	ED	PD	ST	FC	AN
9:30		PD	ST	FC	AN	AN	ST	FC	BES	PD	AN	FC	ED	PD	ST	FC	AN
10:00		PD	ST	FC	AN	AN	ST	FC	BES	PD	AN	FC	ED	PD	ST	FC	AN
10:30			Break			Br	eak	-		Bro	eak			Break	ı	AN	
11:00		PD	ST	FC	TV*	PD*	ST	FC	BES	PD	ST	FC	ED	PD		FC	AN
11:30		PD	ST	FC	TV	PD	ST	FC	BES	PD	ST	FC	ED	PD		FC	MF*
12:00		PD	ST	FC	TV	PD	ST	FC	BES	PD	ST	FC	ED			FC	MF
12:30										•			•			FC	
			Lui	nch			Lu	nch			Lu	nch					MF
1:30																	
1:45	Plenary	PD	ST	FC	TV	PD	ST	FC	BES	PD	ST	FC	ED				MF
2:15	i ionary	PD	ST	FC	TV	PD	ST	FC	BES	PD	ST	FC	SCS*				
2:45	B	PD	ST	FC	TV	PD	ST	FC	BES	PD	ST	FC	SCS				
3:15	Break	PD	ST	FC		PD	ST	FC	BES	PD	ST	FC	SCS				
3:45				eak	T) (Break				Break							
4:15	Plenary	PD	ST	FC	TV	PD	ST	FC	BES	PD	ST	FC	SCS				
4:45	,	PD	ST	FC	TV	PD	ST	FC	BES	PD	ST	FC	SCS				
5:15	B : 0: 10 M 0	PD	ST	FC	TV	PD	ST	FC	BES	PD	ST	FC	SCS				
5:45	Reviewer Orientation Meeting	PD	ST	FC	TV	PD	ST	FC	BES	PD	ST	FC	SCS				
										Revie	wer Fee	dback M	leeting				
6:30			el Cell Co		•									FC: Fuel			
7:00	POSTER SESSION I: Storage,	Room G	3-50 Dirks	en Senat	e Office			SIONII						TV: Tech		Validation	on
7:30	Analysis, SC&S, Manufacturing,	Building	Building, 6:30 – 8:30 PM (see map on H2 AMR Web site)					tion & De			Free	Night		ST: Stora			
8:00	Market Transformation,	0				(inc	-	asic Ene	ergy					PD: Prod		and Deli	very
8:30	Technology Validation	Ů.					Scie	ence)						AN: Analysis			
9:00														BES: Ba		rgy Scie	nces
														ED: Edu			
	*: 15 minute talk, starts 15 minute	s after lis	ted time.											SCS: Sa			ndards
														MF: Mar	nufacturi	ing	

						<u> </u>		o io - Otal i iesci								13-Way-06
	<u>L.</u>			ssion A	<u> </u>			Session B	<u> </u>			ession C	<u> </u>			ssion D
		_ast	Org	Title	-	Last	Org	Title		ast	Org	Title	-	Last	Org	Title
8:45 AM	P F D 0	Farmer	DOE	Hydrogen Production and Delivery Program Element	S T 0	Satyapal	DOE	Hydrogen Storage - Session Review	F G C 0	arland	DOE	Fuel Cells	A N O	Joseck	DOE	Systems Analysis Session Introduction
9:00 AM	P I D	Lomax	H2Gen Inno. Inc.	Low-Cost Hydrogen Distributed Production System Development	S T 1	Lasher	TIAX	Analyses of Hydrogen Storage Materials and On-Board Systems	F D C 1	ebe		Advanced Cathode Catalysts and Supports for PEM Fuel Cells	A N 1	Greene	ORNL	HyTrans Model: Analyzing the Transition to Hydrogen-Powered Transportation
9:30 AM	P H D 2	King	PNNL	BioBioDerived Liquids Reforming	S T 2	Ahluwalia	ANL	System Level Analysis of Hydrogen Storage Options	F M C 2	yers	ANL	Non-Platinum Bimetallic Cathode Electrocatalysts	A N 2	Wang	ANL	Fuel-Cycle Analysis of Hydrogen- Powered Fuel-Cell Systems with the GREET Model
10:00 AM	P . D 3	James	DTI	Distributed BLI Economic Analysis	S T 3	Gross	HyEnergy	Best Practices for Characterizing Hydrogen Storage Properties of Materials	F Z C 3	elenay	LANL	Advanced Cathode Catalysts	A N 15	Melaina	NREL	Discrete Choice Analysis of Consumer Preferences for Refueling Availability
10:30 AM				Break				Break			•	Break			E	Break
11:00 AM	P / D 4	Ahmed	ANL	Distributed Ethanol Reformimg	S T 4	Ott	LANL	DOE Chemical Hydrogen Storage Center of Excellence Overview	F V C a	iswanath n		Development of Alternative and Durable High Performance Cathode Supports for PEM Fuel	T V 0	Garbak	DOE	Technology Validation
11:30 AM	P (D 5	Ozkan	Ohio State U	Investigation of reaction networks and active sites in bio-ethanol steam reforming over Co-based catalysts	S T 5	Aardahl	PNNL	PNNL Progress as Part of the Chemical Hydrogen Storage Center of Excellence	F M C 5	otupally	UTC Fuel Cells	Highly Dispersed Alloy Cathode Catalyst for Durability	T V 5	Wipke	NREL	Controlled Hydrogen Fleet & Infrastructure Analysis
12:00 PM	P F D 6	Rozmiarek	Virent Energy Sys.	Hydrogen Generation from Biomass- Derived Carbohydrates via Aqueous- Phase Reforming Process		Burrell	LANL	Chemical Hydrogen Storage R&D at Los Alamos National Laboratory	F A C 6	hluwalia	ANL	Fuel Cell Systems Analysis				
12:30 PM				Lunch				Lunch				Lunch			L	unch
1:45 PM	D 7		Linde	Integrated Hydrogen Production, Purification & Compression System	S T 7	Sneddon	U of Penn.	Amineborane-Based Chemical Hydrogen Storage	F Ja C 7	ames		Mass Production Cost Estimation for Direct H2 PEM Fuel Cell System for Automotive Applications	T V 1	Grasman	DaimlerChrysler	Hydrogen to the Highways
2:15 PM	D 8		Arizona State U	Zeolite Membrane Reactor for Water- Gas-Shift Reaction for Hydrogen Production	S T 8	Linehan	Rohm and Haas	Chemical Hydrogen CoE - Novel Approaches to Hydrogen Storage: Conversion of Borates to Boron Hydrides	FS C8	inha		Direct Hydrogen PEMFC Manufacturing Cost Estimation for Automotive Applications	T V 2	Frenette	Ford	Hydrogen Fuel Cell Vehicle & Infrastructure Demonstration Program Review
2:45 PM	P I D 9	Hopkins	Pall Corp.	High-Performance, Durable, Palladium-Alloy Membrane for Hydrogen Separation & Purification	S T 9	Dixon	UA	Main Group Element and Organic Chemistry for Hydrogen Storage and Activation	F M C 9	ore	ORNL	Microstructural Characterization Of PEM Fuel Cell MEAs	T V 3	Casey	Chevron	Controlled Hydrogen Fleet and Infrastructure Demonstration and Validation Project
3:15 PM	P I D 10	Hamdan	Giner Electrochemical Systems LLC	Low Cost High Pressure Hydrogen Generator	S T 10		U of Washington	Solutions for Chemical Hydrogen Storage: Hydrogenation/ Dehydrogenation of B-N Bonds	F Jo C 10	ohnston		Applied Science for Electrode Cost, Performance, and Durability	T V 4	Sell	General Motors	Hydrogen Vehicle and Infrastructure Demonstration and Validation
3:45 PM			1	Break				Break				Break			E	Break
4:15 PM	P F D 11	Porter	Distributed Energy Systems	Hydrogen Generation from Electrolysis: 100 kg H2/day Trade Study	S T 11	Power	UC Davis	Chemical Hydrogen Storage using Ultra-High Surface Area Main Group Materials & The Development of Efficient Amine-Borane Regeneration Cycles	F M C 11	itlitsky		Low-cost Co-production of Hydrogen and Electricity	T V 6	Heydorn	Air Products	Validation of an Integrated Hydrogen Energy Station
4:45 PM	P \ D 12	Woodbury	ASU	Development of Water Splitting Catalysts Using a Novel Molecular Evolution Approach	S T 27		UC Berkeley/LBNL	A Synergistic Approach to the Development of New Hydrogen Storage Materials, Part I	F G C 12	oldbach	Arkema	Improved, Low-Cost, Durable Fuel Cell Membranes	T V 7	Heydorn	Air Products	California Hydrogen Infrastructure Project
5:15 PM	D 13		STCH Collaboration	Development of Solar Powered Thermochemical Production of Hydrogen from Water	T 13	Fischer	U of Penn./Drexel Univ.	Carbide-Derived Carbons with Tunable Porosity Optimized for Hydrogen Storage	C 13			Membranes and MEA's for Dry, Hot Operating Conditions	T V 8	Rocheleau	Hawaii Natural Energy Inst.	Hawaii Hydrogen Center for Development and Deployment of Distributed Energy Systems
5:45 PM	P D 14	T-Raissi	UCF/FSEC	Solar-Driven Photocatalitically- Assisted Water Splitting	S T 14	Shaw	U of Connecticut	Effects and Mechanisms of Mechanical Activation on Hydrogen Sorption/Desorption of Nanoscale Lithium Nitrides	F K C 14	err		New Polyelectrolyte Materials for High Temperature Fuel Cells	T V 9	Aceves	LLNL	Automotive Cryogenic Capable Pressure Vessels for Compact, High Dormancy (L)H2 Storage

Wednesday June 11 - Oral Presentations

					vegnesday June 11 - Oral Presentations 1											
	Ti	Session		ļ , , , , , , , , , , , , , , , , , , ,		ssion B	1	I		ession C	!			ession D		
0.45	Last	Org	Title	Last	Org	Title	1	Last	Org	Title	1	Last	Org	Title		
8:45																
9:00	A Ruth	NREL	Macro-System Model	S Heben T 15	NREL	DOE Hydrogen Sorption Center of Excellence (HS-CoE): Overview	F C 15	Fenton	Florida	Lead Research and Development Activity for DOE's High Temperature, Low Relative Humidity Membrane Program	B E S	Meyer	University of North Carolina	Metal-to-Ligand Charge Transfer Excited States on Surfaces and in Rigid Media.Application to Energy Conversion		
9:30	Tolley	RCF, Inc.	Analysis of the Hydrogen Production and Delivery Infrastructure as a Complex Adaptive System		Miami Univ Ohio	A Biomimetic Approach to Metal- Organic Organic Frameworks with High H2 Uptake	F C 16	McGrath		Advanced Materials for Proton Exchange Membranes	B E S	Prezhdo	University of Washington	Real-Time Atomistic Simulation of Light Harvesting and Charge Transport for Solar Hydrogen Production		
10:00	A Steward	NREL	Updates to the H2A Hydrogen Production Discounted Cash Flow Model (H2A version 2.0)	S Yang T 17	U of Michigan	Hydrogen Storage by Spillover	F C 17	Gervasio		Protic Salt Polymer Membranes: High- Temperature Water-Free Proton- Conducting Membranes	B E S	Nozik	NREL	Efficient H2 Production via Novel Molecular Chromophores and Nanostructures		
10:30		Brea	ak		I	Break		1		Break				Break		
11:00	Gardiner	DOE	Hydrogen Delivery Program Element	S Yakobson T 18	Rice U.	Optimization of Nano-Carbon Materials for Hydrogen Sorption	F C 18	Creager		Fluoroalkyl-phosphonic-acid-based proton conductors	B E S	Ghirardi	NREL	Regulation of H2 and CO2 Metabolism: Factors Involved in Partitioning of Photosynthetic Reductant in Green Algae		
11:30	Kelly O	Nexant Inc.	Hydrogen Delivery Infrastructure Options Analysis	S Dillon T 19	NREL	NREL Research as Part of the Hydrogen Sorption Center of Excellence	F C 19	Litt	Western	Rigid Rod Polyelectrolytes: Effect on Physical Properties Frozen-in Free Volume: High Conductivity at low RH	B E S	Adams	University of Georgia	Fundamental Studies of Recombinant Hydrogenases		
12:00	Mintz O	ANL	Hydrogen Delivery Infra. Analysis	S Geohegan T 20	ORNL	Single-Walled Carbon Nanohorns for Hydrogen Storage and Catalyst Supports	F C 20	Pintauro	Case	NanoCapillary Network Proton Conducting Membranes for High Temperature Hydrogen/Air Fuel Cells	B E S	Feldheim	North Carolina State University	Catalyst Discovery Using Biomolecule Evolution		
12:30	:30 Lunch				l	unch				Lunch		,	<u>'</u>	Lunch		
1:45	Petros D	U of Illinois	A combined Materials Science/Mechanics Approach to the Study of Hydrogen Embrittlement of Pipeline Steels	S Liu T 21	Argonne	Hydrogen Storage through Nanostructured Polymeric Materials	F C 21	Herring		Novel Approaches to Immobilized Heteropoly Acid (HPA) Systems for High Temperature, Low Relative Humidity Polymer-Type Membranes	B E S	Lewis	California Institute of Technology	Sunlight-Driven Hydrogen Formation by Membrane-Supported Photoelectrochemical Water Splitting		
2:15	Stalheim 0 18	Secat/ORNL	Materials Solutions for Hydrogen Delivery in Steel Pipeline	S Cooper T 22	Air Products	Enabling Discovery of Materials With a Practical Heat of H2 Adsorption	F C 22	Lvov		New Proton Conductive Composite Materials with Co-continuous Phases Using Functionalized and Crosslinkable VDF/CTFE Fluoropolymers	B E S	Choi	Purdue University	Electrochemical Construction of High Performance, Low Cost Polycrystalline Photoelectrodes for Solar Hydrogen Production		
2:45	Smith	ORNL	Composite Technology for Hydrogen Pipelines	S Ahn T 23	CalTech	Enhanced Hydrogen Dipole Physisorption: Henry's Law and isosteric heats in microporous	F C 23	Lipp		High Temperature Membrane with Humidification-Independent Cluster Structure	B E S	Parkinson	Colorado State University	A Combinatorial Approach to Realization of Efficient Water Photoelectrolysis		
3:15	Adams	SRNL	Hydrogen Permeability and Pipeline Integrity/Fiber Reinforced Composite Pipeline	S Baumann T 24	LLNL	Carbon Aerogels for Hydrogen Storage	F C 24	Mittelsteadt	Giner	Dimensionally Stable Membranes	B E S	Henderson	PNNL	Fundamental Investigations of Water Splitting on Model TiO2 Photocatalysts Doped for Visible Light Absorption		
3:45		Brea				Break				Break				Break		
4:15	Shimko D 21	Gas Equipment Engineering Corporation	Innovative Hydrogen Liquefaction Cycle	T 25	U of North Carolina	Characterization of Hydrogen Adsorption by NMR	C 25	.,.	Tennessee	Poly(cyclohexadiene)-Based Polymer Electrolyte Membranes for Fuel Cell Applications	S	Fujita	BNL	Catalyzed Water Oxidation by Solar Irradiation of Band-Gap-Narrowed Semiconductors		
	Aceves O	LLNL	High pressure, low temperature hydrogen tube trailers	T 26	UC-Santa Barbara	Hydrogen Storage Materials with Binding Intermediate between Physisorption and Chemisorption	F C 26	Borup		PEM Fuel Cell Durability	B E S	Dutta	Ohio State University	Photoactive Inorganic Membranes for Charge Transport		
5:15	Toseland	APCI	Reversible Liquid Carriers for an integrated Production, Storage and Delivery of Hydrogen	S T 12	UCLA	Hydrogen Storage in Metal- Organic Frameworks	F C 27	Tortorelli	ORNL	Nitrided Metallic Bipolar Plates	B E S	Dutton	University of Pennsylvania	Modular Designed Protein Constructions for Solar Generated H2 From Water		
5:45	P Fenske D 24	ANL	Coatings for Centrifugal Compression	S Miller T 28	SwRI	National Testing Laboratory for Solid-State Hydrogen Storage Technologies	F C 28	Andrianowycz		Next Generation Bipolar Plates for Automotive PEM Fuel Cells		Golbeck- Bryant	Penn State	A Hybrid Biological/Organic Half- Cell for Generating Dihydrogen		

13-May-08

Thursday June 12 - Oral Presentations

					Hur		ine 12 - Orai Pres	senialioi						13-May-08	
l	<u> </u>		sion A	\bot			ession B	<u> </u>		ession C	<u>L</u> ,			Session D	
8:45	Last	Org	Title	+	Last	Org	Title	Last	Org	Title			Org DOE	Title Education Session - DOE	
											D			Overview	
9:00	P Pickard D 25	SNL/GA/CEA	Sulfur-lodine Thermochemical Cycle	A N 7	White	LLNL	H2-W The producers value of Water in a Hydrogen Economy	F Goodwin C 29	Clemson University	Effects of Impurities on Fuel Cell Performance and Durability	E D 1	Schmoyer	ORNL	Hydrogen Knowledge and Opinions Assessment	
9:30	D 26	SRNL	Hybrid Sulfur Thermochemical Process Development	A N 8	Sparks	NREL	HyDRA: Hydrogen Demand and Resource Analysis Tool	F Garzon C 30	LANL	Effects of Fuel and Air Impurities on PEM Fuel Cell Performance	E D 2	Placet	PNNL	Hydrogen Safety: First Responder Education	
10:00	P Harvego D 27	INL/ANL/Ceramatec	Laboratory-Scale High Temperature Electrolysis System	A N 9	Melaina	NREL	Lessons Learned for Fueling Infrastructure	F Molter C 31	University of CT	The Effects of Impurities on Fuel Cell Performance and Durability	E D 3	Caton	NREL	Hydrogen Education for Code Officials	
10:30		Bi	reak				Break			Break			Ві	reak	
11:00	D 28	ANL	Alternative Themochemical Cycles	S T 29	Klebanoff		Metal Hydride Center of Excellence	F Cole C 34	Corp	Water Transport in PEM Fuel Cells: Advanced Modeling, Material Selection, Testing, and Design Optimization	D 4		The Media Network	Increasing "H2IQ": A Public Information Program	
11:30	P Bain D 29	NREL	Indirectly Heated Biomass Gasification	S T 30	Liu	HRL Laboratories	Thermodynamically Tuned Nanophase Materials for Reversible Hydrogen Storage	F Cross C 32	Nuvera Fuel Cells	Subfreezing Start/Stop Protocol for an Advanced Metallic Open-Flowfield Fuel Cell Stack	E D 5	Rooney	Hydrogen Educa	H2 and You A Public Education Initiative by the Hydrogen Education Foundation	
	P Roberts D 30	GTI	One Step Biomass Gas Reforming- Shift Separation Membrane Reactor	S T 31	Fang	Univ. of Utah	Chemical Vapor Synthesis and Discovery of H2 Storage Materials: Li-Al-Mg-N-H System	F Jacobson C 36	NIST	Neutron Imaging Study of the Water Transport in Operating Fuel Cells	E D 6	Nagle	Lawrence Hall of Science at UC-Berkeley	Hydrogen Technology and Energy Curriculum (HyTEC)	
12:30		Lu	ınch				Lunch			Lunch			Lu	unch	
1:45	P Vanderspu D 31	t UTRC	A Novel Slurry Based Biomass Reforming Process	S T 32	Robertson		Reversible Hydrogen Storage Materials – Structure, Chemistry and Electronic Structure	F Kandlikar C 33	Rochester Institute of Technology	Visualization of Fuel Cell Water Transport and Performance Characterization Under Freezing Conditions	E D 7	Spruill	NEED	H2 Educate! Hydrogen Education for Middle Schools	
2:15	P Xu D 32	J Craig Venter Institute	Hydrogen From Water in a Recombinant Oxygen-Tolerant Cyanobacteria System	S T 33		Univ. of Pittsburgh/Geor gia Tech	First-Principles Modeling of Hydrogen Storage in Metal Hydride Systems	F Borup C 35	LANL	Water Transport Exploratory Studies	S C S	Ruiz	DOE	Safety, Codes, and Standards	
2:45	P Melis D 33	UC Berkeley	Maximizing Light Utilization Efficiency and Hydrogen Production in Microalgal Cultures	7 S T 36	Ronnebro		Discovery and Development of Metal Hydrides for Reversible On- board Storage	F Mirza C 37	Honeywell	Water/Thermal Management	S C S 1	Burgess	NREL	Hydrogen Codes and Standards	
3:15	P Douglas D 34	Montana State University	Use of Biological Materials and Biologically Inspired Materials for Hydrogen Catalysts	S T 35	Brown	ORNL	Complex Hydrides for Hydrogen Storage Studies of the Al(BH4)3 System	F TeGrotenhuis C 38	PNNL	Low-Cost Manufacturable Microchannel Systems for Passive PEM Water Management	SCSQ	Somerday	SNL	Materials Compatibility	
3:45			reak				Break			Break			Ві	reak	
4:15	P McFarland D 38	U. of CA Santa Barbara	Development of Cost Effective Materials for PEC Production	S T 34	Bowman	Laboratory	Development and Evaluation of Advanced Hydride Systems for Reversible Hydrogen Storage	F Swamy C 39	Intelligent Energy	Development and Demonstration of a New-generation High Efficiency 1-10 kW Stationary PEM Fuel Cell System	_	Fassbende r	PNNL	Hydrogen Safety Tools: Software and Hardware	
4:45	D 35	MV Systems	PHOTOELECTROCHEMICAL HYDROGEN PRODUCTION: DOE PEC Working Group Overview & UNLV-SHGR Program Subtask	S T 37			Effect of Trace Elements on Long- Term Cycling and Aging Properties of Complex Hydrides for Hydrogen Storage	F Vogel C 40	Plug Power Inc.	International Stationary Fuel Cell Demonstration	C S 4	Rockward		Hydrogen Fuel Quality	
5:15	D 36	NREL	Photoelectrochemical Systems for Hydrogen Production	S T 38			Fundamental studies of advanced high-capacity reversible metal hydrides/ Recharging of Light Metal Hydrides Through Supercritical Fluid Hydrogenation	F Staudt C 41		Intergovernmental Stationary Fuel Cell System Demonstration	C 5		SNL	Hydrogen Release Behaviour	
5:45	P Xu D 37	Midwest Optoelectronics	Critical Research for Cost-effective Photoelectrochemical Production of Hydrogen	S T 39	Graetz	BNL	Aluminum Hydride Regeneration	F Strayer C 42	UTC Power	Stationary PEM Fuel Cell Power Plant Verification	S C S 6	Weiner	PNNL	Hydrogen Safety Panel	

13-May-08

Friday June 13 - Oral Presentations

13-May-08

	1 may dule 10 - Graff resentations													
		Se	ssion A			Session B				Session C	Session D			
	Last	Org	Title	Last	Org	Title		Last	Org	Title	Last	Org	Title	
9:00	P Jack D 39	Eltron Research Inc.	Scale-up of Hydrogen Transport Membranes for IGCC and FutureGen Plants	S Anton T 40	SRNL	Fundamental Reactivity Testing and Analysis of Hydrogen Storage Materials & Systems	F C 43	Norrick	Cummins	Diesel Fueled SOFC System for Class 7/Class 8 On-Highway Truck Auxiliary Power	A Dogan N 10	U Missouri- Rolla	Hydrogen and Fuel Cell Analysis: Lessons Learned from Stationary Power Generation	
9:30	P Coulter D 40	Southwest Research Institute	Cost-Effective Method for Producing Self-Supporting Pd Alloy Membrane for Use in the Efficient Production of Coal- derived Hydrogen	S Mosher T 41	UTRC	Quantifying & Addressing the DOE Material Reactivity Requirements with Analysis & Testing of Hydrogen Storage Materials & Systems	F C 44	Blake	Delphi	Solid Oxide Fuel Cell System Development for Auxiliary Power in Heavy Duty Vehicle Applications	A Kumar N 11	ANL	Hydrogen Quality Issues for Fuel Cell Vehicles	
10:00	P Emerson D 41	United Technologies	Experimental Demonstration of Advanced Palladium Membrane Separators for Central High-Purity Hydrogen Production	S Dedrick T , 42	Sandia- Livermore	Chemcial and Environmental Reactivity Properties of Metal Hydrides within the Context of Systems	F C 45		MTI Micro Fuel Cells	DMFC Prototype Demonstration for Consumer Electronic Applications	A Kromer N 12	TIAX	Update on Platinum Availability and Assessment of Platinum Leasing Strategies for Fuel Cell Vehicles	
10:30		ı	Break			Break				Break	A Wuebble N 13	University of Illinois- Urbana- Champaign	Evaluation of the Potential Large-Scale Use and Production of Hydrogen in Energy and Transportation Applications	
11:00	P Barton D 42	Western Res. Ins. & U of Wyoming Res.Corp.	Integration of a Structural Water Gas Shift Catalyst with a Vanadium Alloy Hydrogen Transport Device				F C 46	Wells	Polyfuel Inc.	DMFC Power Supply for All-Day True-Wireless Mobile Computing	A Grieb N 14	Tetra Tech	Potential Environmental Impacts of Hydrogen-Based Transportation and Power Systems	
11:30	Buxbaum D 43	REB Research & Consulting	High Flux Metallic Membranes for Hydrogen Recovery & Membrane Reactors				F C 47		U of So. Carolina	Fuel Cell Research at the University of South Carolina	M Devlin F	DOE	Manufacturing Session Overview (Note 11:45 start)	
12:00							F C 48	Liu	ANL	Novel PEMFC Stack Using Patterned Aligned Carbon Nanotubes as Electrodes in MEA	M Ulsh F 2	NREL	Fuel Cell MEA Manufacturing R&D	
12:30							F C 49	Snyder	Montana State	Detection of Trace Platinum Group Metal Element Particulates with Laser Spectroscopy	M Ryan F 3	NCMS	Advanced Manufacturing Technologies for Renewable Energy Applications - a DoE/NCMS Partnership	
		ı	1			1	1			1	M Wood F 4	Profile Comp	Rapid Manufacturing of Carbon Composite High Pressure Storage Cylinders (Note start time 12:50 - an NCMS project)	
											M Roberts	UTC Power	Technologies for Mass-Manufacturable	

M F 4	Wood	Profile Compo	Rapid Manufacturing of Carbon Composite High Pressure Storage Cylinders (Note start time 12:50 - an NCMS project)
M F 5	Roberts	UTC Power	Technologies for Mass-Manufacturable Manifolds and Seals for PEM Fuel Cells in Transportation Applications (Note start time 1:10, an NCMS project)
M F 6	Kountz	DuPont Fuel (Develop Low-Cost MEA3 Process (Note start time 1:30, an NCMS project)
M F 7	Stanfield	NIST	NIST Fuel Cell Manufacturing Research Project Metrology for Fuel Cell Manufacturing

	<u> </u>		13-May-00
No.	Last	Organization	Title
STP 1	Ott	LANL	DOE Chemical Hydrogen Storage Center of Excellence Overview
STP 2	Baker	LANL	Chemical Hydrogen Storage R&D at Los Alamos National Laboratory
STP 3	Aardahl	PNNL	PNNL Research as part of the Chemical Hydrogen CoE
STP 4	Gore	Purdue University	Purdue Hydrogen Systems Laboratory
STP 5	Damle	RTI	Development of Regenerable, High-Capacity Boron Nitrogen Hydrides For Hydrogen Storage
STP 6	Neumann	NIST	Neutron Characterization in support of the Hydrogen Sorption Center of Excellence
STP 7	Udovic	NIST	Neutron Characterization and Calphad in support of the Metal Hydride Center of Excellence
STP 8	Liu	Duke U	Optimizing the Binding Energy of Hydrogen on Nanostructured Carbon Materials through Structure Control and Chemical Doping
STP 9	Simpson	NREL	DOE HSCoE: Repeat of COE Talk on a poster
STP 10	Heben	NREL	NREL Research as Part of the HSCoE: expanded NREL Technical content
STP 11	Chung	Penn State	Advanced Boron and Metal Loaded High Porosity Carbons
STP 12	Kittrel	Rice U.	Nanoengineering the Forces of Attractionin a Metal-Carbon Array for H2Uptake
STP 13	Klebanoff	Sandia-Livermore	Metal Hydride Center of Excellence Overview, Repeat of talk on poster
STP 14	Klebanoff	Sandia-Livermore	Sandia work for MHCoE: expanded poster no review
STP 16	Arsenault	UTRC	Catalyzed Nano-Framework Stablized High Density Reversible Hydrogen
317 10	Arsenault	UIKC	Storage Systems
STP 17	Kundaliya	Intematix	High Throughput Combinatorial Chemistry Development of Complex Hydrides
STP 18	Clemens	Stanford U	Thermodynamically Tuned Nanophase Materials for Reversible Hydrogen
311 10	Ciemens	Starilord O	Storage: Structure & Kinetics of Nanoparticle and Model System Materials
STP 19	Zidan	SRNL	Alane Electrochemical Recharging
STP 20	Anton	SRNL	LiMgN Sorption Kinetics and Solid State Hydride System Engineering for the
			MHCOE
STP 21	Ahn	California Institute of Tech	Synthesis of Nanophase Materials for Thermodynamically Tuned Reversible Hydrogen Storage
STP 22	Zhao	OSU	Lightweight Intermetallics for Hydrogen Storage
STP 23	Lewis	UOP	Discovery of Novel Complex Metal Hydrides for Hydrogen Storage through Molecular Modeling and Combinatorial Methods
STP 24	Goudy	Delaware State University	Center for Hydrogen Storage Research at Delaware State University
STP 25	Cooper	Air Products	Hydrogen Storage by Reversible Hydrogenation of Liquid-phase Hydrogen Carriers
STP 26	Hwang	Michigan Tech Univ.	Novel Metal Perhydrides for Hydrogen Storage
STP 27	Shelby	Alfred	Glass Microspheres for Hydrogen Storage
STP 28	Fan	Gas Technology Institute	Electron-Charged Graphite-Based Hydrogen Storage Material
STP 29	Cabasso	State University of New York	Polymer-Based Activated Carbon Nanostructures for H2 Storage
STP 30	Liu	Quantum	H2 Tank Manufacturing Optimization
STP 31	Stefanakos	U of South Florida	Hydrogen Storage Research
STP 32	Bhattacharyya	U of Arkansas	An Integrated Approach for Hydrogen Production and Storage in Complex
	,,		Hydrides of Transitional Elements
STP 33	Heske	UNLV	Hydrogen Fuel Cells and Storage Technology Project
STP 34	Redmond	Limnia (formerly FST)	Modular Storage Systems
ANP 1	Michael	Penev	Hydrogen Technology Analysis: H2A Stationary Power Production Model
ANP 3	Duffy	NREL	DOE Hydrogen Program Risk Analysis in Support of EERE's Portfolio Analysis
ANP 4	McDaniel	SNL	Hydrogen Infrastructure Analyses
SCSP 1	Nakarado	Regulatory Logic	Codes & Standards for the Hydrogen Economy
SCSP 2	Lieberman	Intelligent Optical Systems	Hydrogen Optical Fiber Sensors
SCSP 3	Schoenung	Longitude 122 West	IEA Hydrogen Task 18: Evaluation of Integrated Demonstration Systems
TVP 1	Portwood	Florida Hydrogen Initiative	Florida Hydrogen Initiative
TVP 2	Eudy	NREL	Technology Validation: Fuel Cell Bus Evaluations

Wednesday Posters

No	Loot	Organization	Title
No.	Last	Organization	Fundamentals of a Solar-thermal Mn2O3/MnO Thermochemical Cycle to Split Water
	Weimer	CU	Novel Low-Temperature Proton Transport Membranes
PDP 2	Payzant	ORNL	
PDP 3	Welk	SNL	Ultra-thin Proton Conduction Membranes for H2 Stream Purification with Protective Getter Coatings Renewable Electrolysis Integrated System Development and Testing
PDP 4	Harrison	NREL	PEM Electrolyzer Incorporating an Advanced Low-Cost Membrane
PDP 5	Hamdan	Giner Electrochemical Systems	· · · · · · · · · · · · · · · · · · ·
PDP 6	Shimko	Avalence LLC	High-Capacity, High Pressure Electrolysis System with Renewable Power Sources
PDP 7	Philippidis	Florida International University	Photobiological Hydrogen Research
PDP 8	Aceves	LLNL	Inexpensive Delivery of Cold Hydrogen in High Performance Glass Fiber Composite Pressure Vessels
PDP 9	Osborne	Concepts NREC	Development of a Centrifugal Hydrogen Pipeline Gas Compressor
PDP 10	Walton	Mohawk Innovative Technologies	Oil-Free, Centrifugal Hydrogen Compression Technology Demonstration
PDP 11	Somerday	SNL	Enabling Hydrogen Embrittlement Modeling of Structural Steels
PDP 12	Martin	Edison Materials Tech Center	Developing Improved Materials to Support the Hydrogen Economy
PDP 13	Goswami	U of South Florida	Hydrogen Production and Fuel Cell Research
PDP 14	Swalla	GE Global Res.	Advanced Alkaline Electrolysis
PDP 15	Misra	U of Nev. Reno	Photoelectrochemical Generation of HydrogenUsing Heterostructural Titania Nanotube Arrays
PDP 16	Evans	NREL	Distributed Bio-Oil Reforming
PDP 17	Liu	GE Global Res.	Integrated Short Contact Time Hydrogen Generator (SCPO)
PDP 18	Roth	TIAX	Solar Thermochemical Hydrogen (STCH) Production -H2A Analysis
PDP 19	Panchal	ANL	OTEC Cost Analysis for NH3/H2 Production
PDP 20	Klug	Concurrent Tech. Corp	Pipeline Working Group Support and Off-Board Hydrogen Storage Development
PDP 21	Mazumber	U. Arkansas Little Rock	Photoelectrochemical Hydrogen Production
PDP 22	Balachandran	ANL	Distributed Reforming of Renewable Liquids via Water Splitting using Oxygen Transport Membrane (OTM
PDP 23	Winstryg	Lincoln Composites	Design and Development of High Pressure Hydrogen Storage Tank for Storage and Gaseous Truck Delivery
PDP 24	Deng	U. of Toledo	Production of Hydrogen For Clean and Renewable Sources of Energy for Fuel Cell Vehicles
PDP 25	Liu	Media and Process Technology Inc.	Water-Gas Shift via a Single Stage Low-Temperature Membrane Reactor
PDP 26	Ghirardi	NREL	Biological Systems for Hydrogen Photoproduction
PDP 27	Maness	NREL	Fermentative and Electrohydrogenic Approaches to Hydrogen Productior
PDP 28	Hesmat	MiTi	Hydrogen Compression
PDP 29	Lipp	FuelCell Energy	Hydrogen Compression
PDP 30	Schmura	Concurrent Tech. Corp	Northeastern I-95 Corridor and Pennsylvania Indigenous Energy
PDP 31	Schwartz	Praxair	Advanced Hydrogen Liquefaction Process
PDP 32			Active Magnetic Regeerative Liqufier
	Barclay	Prometheus Energy	
PDP 33	Tao	Materials and Systems Research	Development of a Novel Efficient Solid-Oxide Hybrid for Co-generation of Hydrogen and Electricity Using Nearby Resources for Local Applications
DDD 04	T	NDEI	TBD
PDP 34	Turner	NREL	
PDP 35	Feng	ORNL	H2 Permeability and Integrity of Steel Welds
FCP 1	Wainright	Case Western R Univ	Light-weight, Low Cost PEM Fuel Cell Stacks
FCP 2	Shore	BASF	Platinum Group Metal Recycling Technology Development
FCP 3	Grot	Ion Power, Inc.	Platinum Recycling Technology Development
FCP 4	Rockward	LANL	Component Benchmarking Subtask Reported: USFCC Durability Protocols and Technically-assisted Industrial
			and University Partners
FCP 5	Parsons	UTC Fuel Cells	Low Cost, Durable Seals For PEM Fuel Cells
FCP 6	Gee	Honeywell	Cost and Performance Enhancements for a PEM Fuel Cell Turbocompressor
FCP 7	Bloom	ANL	Fuel Cell Testing at the Argonne Fuel Cell Test Facility
FCP 8	Lawrance	Idatech	Research & Development for Off-Road Fuel Cell Applications
FCP 9	Mahadevan	Battelle	Market Opportunity Assessment for Direct Hydrogen PEM Fuel Cells in Pre-automotive Markets
FCP 10	Leshchiner	Nuvera Fuel Cells, Inc	Cost-Effective High Performance Advanced Reforming Module (CHARM)
FCP 11	Mauritz	U of So. Mississippi	Characterization of PEMFC Membrane Durability
FCP 12	Mauser	Chemsultants International	Microstructural Design and Development of High Performance Polymer Electrolyte Membranes
FCP 13	Lui	Giner Electrochemical Systems, LLC	Dimensionally Stable High Performance Membrane
FCP 14	Berry	Kettering University	Development of Novel PEM Membrane and Multiphase CFD Modeling of PEM Fuel Cel
FCP 15	Popov	University of South Carolina	Novel Non-Precious Metals for PEMFC: Catalyts Selection through Molecular Modeling and Durability Studies
MFP 1	Lei	Cabot Corp.	Membrane Manufacturing
MFP 2	McCarthy	Protonex Corp.	Novel Manufacturing Process for PEM Fuel Cell Stacks
MFP 3	Mohring	Millenium Cell	Manufacturable Chemical Hydride Fuel System Storage for Fuel Cell Systems
MFP 4	Ramirez	ASME Standards Technology	Non-Destructive Testing and Evaluation Methods
			Hydrogenases of Methanococcus maripaludis
BESP 1	Leigh	University of Washington	Theoretical Research Program on Bio-Inspired Inorganic Hydrogen Generating Catalysts and Electrodes
BESP 2	Selloni	Princeton University	
BESP 3	Krumholz	University of Oklahoma	Identification of Enzymes involved in Syntrophic H2 production
BESP 4	Wang	University of Hawaii	Production and Engineering of Hydrogenase as a Biocatalyst for Hydrogen Fue
BESP 5	Armstrong	University of Arizona	Electronically Wired Semiconductor Nanoparticles: Toward Vectoral Electron Transport in Hybrid Materials
BESP 6	Zhang	UC Santa Cruz	Hydrogen Generation Using Integrated Photovoltaic and Photoelectrochemical Cells
BESP 7	Barber	Penn State	Tandem Hybrid Solar Energy System
BESP 8	Mallouk	Penn State	Photoelectrochemistry of Semiconductor Nanowire Arrays
BESP 9	Guerra	Nanoptek Corporation	Strained TiO2 Photoanodes
BESP 10	Grimes	Penn State	Highly Ordered Nanotube Arrays and their Use in Water Photoelectrolysis
BESP 11	Brewer	Virginia Tech	Photoinitiated Electron Collection in Mixed-Metal Supramolecular Complexes: Development of Photocatalysts